

WEST SIXTH STREET BRIDGE  
(West Pecan Street Bridge) WEST PECAN STREET BRIDGE  
Texas Historic Bridges Recording Project  
Spanning Shoal Creek at West Sixth Street  
Austin  
Travis County  
Texas

HAER No. TX-51

HAER  
TEX  
227-AUST,  
24-

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
National Park Service  
Department of the Interior  
1849 C St., NW  
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HISTORIC AMERICAN ENGINEERING RECORD

WEST SIXTH STREET BRIDGE  
(West Pecan Street Bridge)

HAER No. TX-51

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227-AUST,  
24-

Location: Spanning Shoal Creek at West Sixth Street, Austin, Travis County, Texas.  
UTM: 14/620150/3349210  
USGS: Austin West, Texas, quadrangle.

Date of Construction: 1887.

Designer: Unknown.

Builder: Unknown.

Present Owner: City of Austin.

Present Use: Vehicular bridge.

Significance: This bridge, one of the state's oldest masonry arches, is located at the site of the first bridge in Austin and continues to serve one of the city's principal east-west arteries.

Historian: Robert W. Jackson, August 1996.

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## Introduction

The three-arch stone bridge constructed in 1887 across Shoal Creek at West Sixth Street in Austin represents not only a valuable element in the transportation network of a modern American city, but also survives as an extant example of late nineteenth-century adaptation of local materials and skilled labor to the geographical imperatives of the natural environment. A hand-built structure erected in an age when rapid industrialization was offering machine-built solutions to the challenges posed by nature, this bridge replaced an earlier iron bowstring arch in a reversal of the usual pattern of short-span bridge replacement.

Typically, stone bridges constructed in the eighteenth or early nineteenth centuries were rapidly being replaced in the late nineteenth century by metal bridges. But in Austin, a community with an abundance of limestone for building material and a wealth of skilled masons, there were several instances in the late nineteenth century of iron bridges succeeded by stone arches as crossings of principal inner-city creeks. In this particular case, stone bridges provided a very practical means of spanning those creeks which have been determining geographical factors from the earliest days of the city's history.

## Development of Austin, 1839-1887

In response to an Act of the Texas Congress of January 14, 1839, which provided for the selection of a permanent site for the Republic's capital, President Mirabeau Lamar sent a land commission on an inspection tour of likely sites with special instructions to examine the juncture of Shoal Creek and the Colorado River. Lamar's partiality to this site was apparent when he appointed his friend Edwin Waller as agent to plan the basic layout of the city of Austin weeks before the site selection was announced in April 1839. Waller laid out the one mile square plan of the community between "two beautiful streams of clear water" (Shoal and Waller creeks) on the north banks of the Colorado, with a broad central avenue (Congress Avenue) extending northward from the river to "Capitol Square," which commanded good views of the town from the north. The streets were 80'-0" wide, except for Congress Avenue, 120'-0"; College Avenue, 120'-0"; North Avenue, 100'-0"; West Avenue, 200'-0"; and East Avenue, 200'-0". The unusual width of the West Sixth Street Bridge (80'-0") is attributable to the generous dimensions of the streets as laid out by Waller.<sup>1</sup>

Waller named streets running north and south for the rivers of the Republic of Texas, but his proposal to number the streets running east to west was initially rejected in favor of the names for typical Texas trees. In 1887, east to west streets were finally redesignated by numbers

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<sup>1</sup> David C. Humphrey, *Austin: An Illustrated History* (Northridge, California: Windsor Publications, 1985), pp. 24-25. Two other valuable histories utilized for this report are Mary Starr Barkley, *History of Travis County & Austin, 1839-1899* (Waco, Texas: Liberty Binding, 1963); and Katherine Hart, *Austin & Travis County: A Pictorial History, 1839-1939* (Austin, Texas: Encino Press, 1975).

as Waller had originally intended. Because the subject bridge was built in the year of the change from names to numbers, it was identified by both street name and number for many years after its completion.

The early history of bridges inside the city limits of Austin is basically a story of the bridging and rebridging of the two main creeks located inside the city limits, Shoal and Waller, and of the smaller Little Shoal Creek located just east of Shoal Creek (now completely covered over). The Colorado River, first crossed at Austin by a short-lived pontoon bridge from 1869 to 1870, was still outside the city limits when the first iron wagon bridge to span the river was completed at the foot of Congress Avenue in 1884. There were no bridges of any description inside the city limits until 1865, the year a foot bridge was erected by the U.S. military authorities over Shoal Creek at West Pecan (Sixth) Street. The next bridge was built of stone about 1866 over Waller Creek, leading to the old arsenal grounds.<sup>2</sup> In the years since, numerous stone, iron or concrete bridges have been built over these three creeks, but none have met the needs of the community as long or as well as the West Sixth Street Bridge.

The original foot bridge erected across Shoal Creek no doubt served the interests of James Raymond, who owned a considerable amount of land both north and south of West Pecan Street just west of Shoal Creek. Raymond was State Treasurer and a principal in the banking firm of Raymond and Whitis in 1855, the year he built a rather substantial house on West Pecan Street just west of the creek, approximately where West Sixth Street now crosses Lamar Boulevard. He later developed plans for an exclusive residential subdivision to be located near his home between West Pecan Street and the sandy northern banks of the Colorado River. It was the necessity of accessing that subdivision that apparently encouraged Raymond to become involved in the reconstruction of the original footbridge across the creek in 1869. The *Tri-Weekly State Gazette* reported on August 27 of that year:

There is once more an excellent foot bridge over Shoal Creek, the military, together with Mr. Raymond and Judge Duval, having rebuilt the old one, which gave way, owing to bad construction and the injury done it by bad boys, white and black. We hope if any are caught swinging on the iron supports or maliciously or thoughtlessly doing anything to injure the new bridge, that prompt punishment may follow.<sup>3</sup>

As excellent as this footbridge may have been, however, a wagon bridge across Shoal Creek was necessary in order for the area west of the city limits to be profitably developed. In 1871, Raymond began advertising his Raymond Plateau subdivision, and the promotional plat

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<sup>2</sup> Frank Brown, "Annals of Travis County and of the City of Austin: From the Earliest Times to the Close of 1875" (typescript, Austin History Center, n.d.), p. 22.

<sup>3</sup> *Tri-Weekly State Gazette* (Austin, Texas), 20 August 1891.

for that subdivision shows an iron bridge spanning Shoal Creek at West Pecan Street, although it appears that the plat was anticipating what would be, rather than what was.<sup>4</sup> The *Daily State Journal* reported on March 4, 1872:

The city government has completed the eastern or corporate approach to the new iron bridge over Shoal Creek, and it now remains for the county to complete the western approach, which, we believe, is just outside the corporate city limits. The use of this bridge is very much needed, as several vehicles have broken down recently while going up and down the steep hill on either side and through the creek bottom.<sup>5</sup>

The type of bridge erected at this time can be determined by analysis of 1873 and 1887 bird's-eye views of Austin drawn by Augustus Koch, which clearly show a bowstring arch at this location.<sup>6</sup>

In addition to his role in reconstructing the first bridge in Austin, Raymond was also involved in a grander bridge enterprise. In 1880, the Travis County Road and Bridge Company was organized, with Raymond as president.<sup>7</sup> Although it is unclear what was accomplished by this organization prior to June 1886, in that month the multiple-span iron toll bridge completed at the foot of Congress Avenue in 1884 was bought by the company and made a free bridge.<sup>8</sup>

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<sup>4</sup> Travis County, *Plat Records of Travis County*, vol. 5 (Travis County Courthouse, Austin, Texas), p. 401.

<sup>5</sup> *Daily State Journal* (Austin, Texas), 4 March 1872.

<sup>6</sup> Augustus Koch, "Bird's Eye View of the City of Austin; Travis County, Texas" (Madison, Wisconsin: J. J. Stoner, 1873; lithograph, Barker Center For American History, Austin, Texas); and Koch, "Austin, State Capital of Texas," 1887 (lithograph, Austin History Center, Austin, Texas). In *Views and Viewmakers of Urban America: Lithographs of Towns and Cities in the United States and Canada, Notes On the Artists and Publishers, and A Union Catalog of Their Work, 1825-1925* (Columbia: University of Missouri Press, 1984), p. 185, John W. Reps states that "Koch revisited and redrew several cities. These sets of views are particularly useful for determining the urban development taking place between the dates of the two views." He also finds that Koch "seems to have drawn with substantial accuracy."

<sup>7</sup> Barkley, p. 268.

<sup>8</sup> *Ibid.*, p. 272.

### Construction of Stone Bridge, 1887

For reasons which are unclear, the small bowstring arch that provided access to Raymond Plateau was in need of replacement by 1887. At the city council meeting of January 3, the city engineer was instructed to estimate "the cost of moving the iron bridge at present located on West Pecan Street over Shoal Creek to Cedar Street . . . and replacing same with a substantial stone or iron bridge, the full width of the street."<sup>9</sup> At the next meeting of the council on January 17, the city engineer estimated:

The cost of constructing an iron bridge on West Sixth Street over Shoal Creek, sixty feet wide with two ten feet sidewalks and abutments and wing walls complete, which fixes the cost at \$5,204; and an estimate of the cost of removing the iron bridge, now on West Sixth Street, over Shoal Creek, to West Cedar Street, over Shoal Creek with abutments, wing walls, new woodwork and fresh painting and putting bridge up \$1,543.<sup>10</sup>

No mention was made by the city engineer at this time concerning the erection of a stone bridge, and on March 7, 1887, a proposal was presented to the council for the appropriation of \$6,750 for building "an iron bridge over Shoal Creek on West Pecan Street, and removing an iron bridge on said street and replacing the same over Shoal Creek on West Cedar [Fourth] Street."<sup>11</sup> This was referred to a special committee, composed of four representatives from the west side of town (west of Congress Avenue) and four from the east side of town.

This committee apparently reconsidered the type of bridge to be erected, because on March 21, 1887, the council passed an ordinance providing that "the following sums of money, or so much thereof as may be necessary," be appropriated "for the erection of a double-arched stone bridge over Shoal Creek on West Pecan Street" — \$6,126.20; and "for removing the iron bridge now over Shoal Creek on West Pecan Street and placing same over Waller Creek on East Water [First] Street" — \$1,593.<sup>12</sup> As built, however, the new stone bridge was a triple arch instead of a double arch. It would seem, therefore, that the construction plans were changed sometime between when the specifications were drawn up and when the bridge was completed.

There is no record of work done on this bridge other than two cryptic observations in *The Austin Daily Statesman*, which noted on Saturday, May 7, 1887, that "work has commenced on the West Pecan Street Bridge," and further noted on Thursday, July 28, 1887, that "the bridge

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<sup>9</sup> City of Austin, *City Council Minutes*, vol. F, p. 260.

<sup>10</sup> *Ibid.*, p. 565.

<sup>11</sup> *Ibid.*, p. 595.

<sup>12</sup> City of Austin, *City of Austin Ordinances*, vol. B, p. 282.

over Shoal Creek, on West Pecan Street, will be completed in a few days and will be a credit to the city. A transfer of passengers on the street car is now necessary, and will soon be dispensed with."

The only other mention of work related to this project may be found in *The Austin Record*, which noted on July 23, 1887, that "the city has contracted with Mr. Hoffard . . . to take down and remove the iron bridge now spanning Shoal Creek. It is to be removed to East Third [Cypress] Street and placed over Waller Creek." Apparently, the city had problems in deciding where on Waller Creek to relocate this old bridge. It had previously been suggested on March 7, 1887, that this bridge be moved to East Fourth Street, and the council had voted on March 21 to move it to East First Street before signing the contract with Mr. Hoffard for removal to East Third Street. However, on March 4, 1889, a citizens' petition was presented to the council requesting the city to assist in bridging Waller Creek at Magnolia Avenue [Nineteenth Street] by permitting the Travis County Commissioner's Court to use "the iron bridge formerly over Shoal Creek on West Pecan [Sixth] Street, . . . which is not now in use by the city."<sup>13</sup> Unfortunately, the eventual fate of this structure is unknown.

#### **Evolution of Structure and Site, 1887-Present**

Little more than half a year after its completion, on February 6, 1888, city engineer Sam Matthews reported to the council that the new stone bridge over Shoal Creek at West Pecan [Sixth] Street was in need of repair, and he later estimated that repairs would cost \$2,536.<sup>14</sup> But the street committee said there was no money to fix bridges.<sup>15</sup> Shortly thereafter, Mayor Joseph Nalle, who had succeeded J. W. Robertson on December 15, 1887, spoke to the council concerning the debt left by the Robertson administration, and of the necessity of repairing and rebuilding "the stone bridges built, at a heavy cost, by the administration last preceding us. The city engineer's report shows that it will cost \$4,635 to repair the four bridges he has examined (E. 16th, E. 11th, E. 6th, and W. 6th). . . ." Nalle was so disturbed by the state of the city finances, he suggested that the State legislature make it a felony, through an amendment to the city charter, for the mayor and board of aldermen (council) to create debts in excess of the amount of revenues.

The charter is plain in its inhibition on this subject, but no penalty attaches, and therefore this provision, unfortunately is more honored in the breach than in the

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<sup>13</sup> *City Council Minutes*, vol. G, p. 458.

<sup>14</sup> *Ibid.*, p. 211, 183.

<sup>15</sup> *Ibid.*, p. 199.

observance, and no protection is afforded the people against a reckless and extravagant council creating any number of debts it may seem fit to make. . . .<sup>16</sup>

Although there is no evidence to suggest that the Robertson administration was guilty of any corruption in its handling of bridge contracts, it does appear that the expenditure of a great deal of money was recommended by the special committee on streets and bridges and that these determinations were made outside of the public view. The competence of the contractor for the work performed on the West Sixth Street Bridge is also questionable, given that on March 3, 1888, the city engineer again reported that the four stone arched bridges on East Sixteenth, East Eleventh, East Sixth and West Sixth were all in need of repair, and that,

the beautiful three arched bridge on West Sixth, or Pecan, is in decidedly worse condition than it was at the time of my last report upon the same. The protracted spell of wet weather has demonstrated the inferior quality of the mortar used in its construction and I estimate it will require two thousand five hundred and thirty six (\$2,536) dollars to put same in repair.<sup>17</sup>

Due to incomplete records, it is difficult to determine when, or how often, repairs to the bridge have been made, but given the frequency and severity of flooding by Shoal Creek it is probable that the bridge has been damaged on numerous occasions throughout its life. An examination of the structure indicates that there may have been extensive repairs at some point, but it is believed that there have not been any significant alterations since initial construction, with one possible exception. The south side of the bridge has a parapet with capstones rising 2'-11" above the sidewalk. The north side of the bridge is level with the sidewalk at the top, although there is a steel guardrail on that side which is obviously a later addition. It may be that a flood which washed debris over the top of the bridge, such as the flood of 1915, could have damaged the parapet enough to require removal. Otherwise, the bridge appears to be essentially the same structure that was built in 1887.

### **Description**

The bridge as it currently exists is 80'-0" wide, 90'-0" long, and has three arches of about 24'-0" span at the base. As noted, the bridge is unusually wide for a late nineteenth-century wagon bridge, but that is due to the width of the streets as originally determined by Edwin Waller's 1839 city plan. Fortunately, that width allowed for the passage of wagons going in either direction, and also facilitated the installation of tracks for mule-drawn streetcars, which

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<sup>16</sup> Ibid., p. 225.

<sup>17</sup> Ibid., p. 241.



WEST SIXTH STREET BRIDGE  
(West Pecan Street Bridge)  
HAER No. TX-51  
(Page 8)

were first used in Austin in 1875.<sup>18</sup> The rusticated limestone blocks from which the bridge is constructed were probably quarried in the local area, but no records exist to indicate exactly where the building materials came from. Piers are probably founded on bedrock, which is just inches below the surface of the ground in this part of Austin.

The bridge is in good condition, and carries a great deal of daily traffic as part of a major east-west arterial feeding traffic into and out of the central business district. Flood control measures instituted by the City of Austin following the disastrous Memorial Day flood of 1981 should provide a measure of security in terms of the structural integrity of the bridge, thus allowing this unusually well preserved example of late nineteenth-century stone construction to survive into the twenty-first century with only periodic maintenance.

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<sup>18</sup> Hart, p. 34.

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#### **APPENDIX: Suggestions For Further Research**

Due to limitations in the scope of the Texas Historic Bridges Recording Project, several questions which arose during the research and writing of this report remain unanswered. It is suggested that scholars interested in this bridge consider pursuing the following:

1. Who fabricated the iron bowstring bridge erected over Shoal Creek at West Sixth Street in 1872?
2. Little Shoal Creek has been completely covered over. Are the stone arch bridges erected over this creek still intact, though hidden? If so, Austin may have the largest collection of nineteenth-century stone arch bridges in the county.
3. Was the bridge over Shoal Creek at West Sixth Street built with parapets on both sides? If so, when was the north parapet taken down?